

303-750

Work Order ID 117505

April-24-14 11:44:57 AM

117505

Page 1

Item ID: D3501-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bushing

Start Date: 4/30/14

Start Qty: 60.00

60

Cust Item ID:

Required Date: 4/30/14

Req'd Qty: 60.00

60

Customer:

Reference:

Approvals: Process Plan: MLJDate: 14-04-30

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3501	Rev A

100

100

Hardinge

Hardinge CNC LATHE SMALL

0.00

60

0

DAS
25
9-69

/ 14-05-13

Hardinge CNC Lathe Small

1-TURN AS PER FOLIO FA650 & DWG D3501 ,FOLIO
REV: AA DWG REV: A 2-DEBURR AS REQUIRED

110

110

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

60

0

DAS
25
9-69

/ 14-05-13

120

120

QC

Quality Control

QC8- Inspect parts - second check

0.00

60

DAS
40
9-69

/ 14-05-13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

Work Order: _____
 Part No. _____
 NCR No. _____

DISPOSITION

Rework
 Scrap
 Use-as-is
 Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

Skid-tube
 Machining
 Thermoforming
 Large Fab

Crosstube
 Small Fab
 Finishing
 Composite

Water Jet
 Prod. Eng. Coor.
 Rec/Store/Packaging
 Supplier

Engineering
 Quality
 Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General													
	<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced									
	<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up									
	<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure									
	<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld									
	<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled									
	<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other									
	<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge										
	<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread											
	<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set											
	<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration											
	<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence											

Work Order ID 117505

April-24-14 11:44:57 AM

117505

Page 2

Item ID: D3501-1

Revision ID:

Item Name: Bushing

Start Date: 4/30/14

Start Qty: 60.00 ***60***

Required Date: 4/30/14

Req'd Qty: 60.00 ***60***

Reference:

Approvals:

Process Plan: _____ Date: _____

QC: _____ Date: _____

Accept

N900040100

Setup

Start ***NS1***

Stop

NS2

Cust Item ID:

Customer:

Run

Start ***NR1***

Stop

NR2Sequence ID/
Work Center IDOperation
Description

130

130

Packaging

Packaging

Identify as per dwg & Stock Location: ST652

Tooling: _____ Date: _____

SPC (Y/N): _____ Date: _____

Set Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

0.00

0.00

0.00

140

140

QC

Quality Control

QC21- Final Inspection - Work Order Release

Memo

Memo

60x 14-5-13

DAS

26

9.89

MJ 14-05-13AB 14-05-13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework	Scrap	Use-as-is	Skid-tube	Crosstube	Water Jet	Engineering		
NCR No. _____	Suspected	Unapproved		Machining	Small Fab	Prod. Eng. Coor.	Quality		
				Thermoforming	Finishing	Rec/Store/Packaging	Other		
				Large Fab	Composite	Supplier			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
Bending	Bend		Outside Dimensions	Pressure/Forced
Centre Not Concentric	BOM/Route		Over/Under tolerance	Set-up
Cracks	Broken/Damage/Defect		Part Incorrect	Temperature/Cure
Crimp/Kink/Ripple/Wave	Burrs		Part Lost/Missing	Weld
Cuffs	Contamination		Part Moved	Wrong Stock Pulled
Crushing	Countersink		Positioned Wrong	
Heat Treat	Cut Too Short		Power Loss/Surge	Other
Inspection Strip in Tube	Drawing			
Marks/Chatter	Drill Holes			
Turning Sequence	Finish			
Wave/Twist in Tube	Fit/Function			

Picklist Print

April-24-14 11:44:56 AM

Page 1

Work Order ID: 117505

117505
D3501-1

Parent Item: D3501-1

Parent Item Name: Bushing

Start Date: 4/30/14

Required Date: 4/30/14

Start Qty: 60.00

Required Qty: 60.00

Comments: IPP Rev:A New Issue 06-05-09 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.750		Purchased	No			100	f	149.1450	0.0791	5			

M303R0 750

303 Round Bar 0.750

** 5.000

4/14/2013

Location	Loc Qty	Loc Code
MAT028	149.145	
m127464	52.645	
m128882	96.5	

*5.000

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework	Scrap	Use-as-is	Skid-tube	Crosstube	Water Jet	Engineering		
NCR No. _____	Suspected	Unapproved		Machining	Small Fab	Prod. Eng. Coor.	Quality		
				Thermoforming	Finishing	Rec/Store/Packaging	Other		
				Large Fab	Composite	Supplier			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear		General															
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	<input type="checkbox"/> Other												

DART AEROSPACE LTD	Work Order:	117501
Description: Bushing	Part Number:	D3501-1
Inspection Dwg: D3501	Rev: A	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

DAS

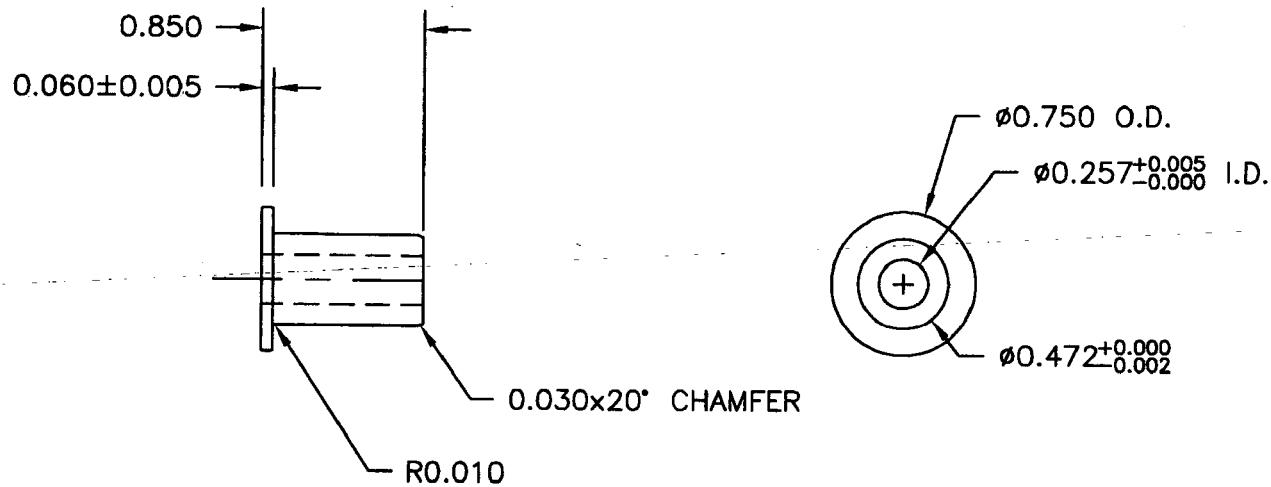
40

Measured by:	<u>SL</u>	Audited by:	<u>40</u> <u>9-89</u>	Prototype Approval:	N/A
Date:	14-5-12	Date:	14/05/13	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.10.27	New Issue	KJ/JLM <i>[initials]</i>	<i>[initials]</i>

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3501
DATE		REV. A SHEET 1 OF 1
06.04.18		TITLE SCALE BUSHING 1:1
A	06.04.18	NEW ISSUE

**D3501-1 BUSHING**

- 1) MATERIAL: AISI 303 SS (REF DART SPEC. M303R)
- 2) FINISH: NONE
- 3) BREAK ALL UNMACHINED SHARP CORNERS 0.010 MAX
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

RELEASED06.08.15 *[Signature]*